

Technical Note
Gross Domestic Product, Fourth Quarter 2002 (Advance)
January 30, 2003

This technical note provides background information about the source data and estimating methods used to produce the estimates presented in the GDP news release; the note also provides some perspective on the estimates. Additional material will become available in the next several days; much of it will be posted to BEA's Web site <www.bea.gov>. In a few weeks, the estimates will be published in BEA's monthly journal, the *Survey of Current Business*. The *Survey* also will provide a more detailed analysis of the estimates ("The Business Situation").

Gross Domestic Product, Fourth Quarter 2002 (Advance)

Real GDP: Based on data available at this time, BEA estimates that real GDP increased 0.7 percent (annual rate) in the fourth quarter of 2002 after increasing 4.0 percent in the third quarter. From the fourth quarter of 2001 to the fourth quarter of 2002, GDP increased 2.8 percent. The major contributors to the slowdown in the fourth quarter of 2002 were a deceleration in consumer spending and downturns in inventory investment and exports.

Consumer spending increased 1.0 percent in the fourth quarter after increasing 4.2 percent in the third; the slowdown primarily reflected a decrease in motor-vehicle purchases after a third-quarter surge. Inventory accumulation slowed in the fourth quarter after stepping up in the third; real change in private inventories subtracted 0.56 percentage point from fourth-quarter real GDP growth.

Real final sales of domestic product -- GDP less change in private inventories -- increased 1.3 percent in the fourth quarter after increasing 3.4 percent in the third.

Prices: The price index for gross domestic purchases increased 1.8 percent in the fourth quarter after increasing 1.2 percent in the third. Excluding food and energy prices, which are more volatile than most other prices, the index increased 1.4 percent after increasing 1.2 percent.

Disposable personal income and personal saving: Real disposable personal income (DPI) increased 2.6 percent in the fourth quarter after increasing 3.1 percent in the third. Current-dollar DPI increased 4.6 percent after increasing 4.9 percent. The personal saving rate -- saving as a percentage of DPI -- was 4.3 percent in the fourth quarter, up from 3.8 percent in the third quarter.

GDP in 2002

The annual level of real GDP was 2.4 percent higher in 2002 than in 2001. This growth rate is 2.1 percentage points higher than the 0.3-percent growth the previous year. The step-up in GDP growth mainly reflected an upturn in inventory investment, an acceleration in consumer spending, and a smaller decrease in exports. Imports, which are a subtraction in the calculation of GDP, turned up. Real change in private inventories added 0.60 percentage point to GDP growth in 2002 after subtracting 1.24 percentage points from GDP growth in 2001. Consumer spending increased 3.1 percent in 2002 after increasing 2.5 percent in 2001. Exports decreased 1.3 percent

after decreasing 5.4 percent, and imports increased 3.5 percent after decreasing 2.9 percent.

The price index for gross domestic purchases increased 1.2 percent in 2002 after increasing 1.9 percent in 2001. Excluding food and energy prices, the price index increased 1.4 percent after increasing 1.8 percent.

Real DPI increased 4.5 percent in 2002 after increasing 1.8 percent in 2001.

Current-dollar DPI increased 5.9 percent after increasing 3.8 percent. The personal saving rate was 3.9 percent in 2002, up from 2.3 percent in 2001.

Source Data for the Advance Estimate

The advance GDP estimate for the fourth quarter is based on source data that are incomplete and that are subject to revision. Three months of source data are available for consumer spending on goods; investment in private equipment other than aircraft; motor vehicle sales and inventories; manufacturing durables inventories other than semiconductors; federal government outlays; and consumer, producer, and international prices. Only two months of data are available for most other key data sources; BEA's assumptions for the third month are shown in table A.

- C For the change in nondurable manufacturing inventories, a small decrease was assumed for December.
- C For the change in non-motor-vehicle merchant wholesale and retail inventories, a decrease was assumed for December.
- C For exports of goods, excluding gold, a decrease was assumed for December.
- C For imports of goods, excluding gold, a somewhat larger decrease was assumed for December, resulting in a slight improvement in the trade balance.

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Table A. KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP
FOR THE FOURTH QUARTER OF 2002

For many of the key series used to prepare the advance estimate of GDP, including retail sales, unit automobile and truck sales and inventories, manufacturers' shipments of nondefense capital goods (other than aircraft), manufacturers' inventories of durable goods, federal defense spending, and consumer, producer, and international price indexes, actual data are available for all months of the quarter.

For the key series shown in this table, actual data for the third month of the quarter usually are not available in time for inclusion in the advance GDP estimate. BEA makes assumptions for the source data that are not yet available; assumptions for December 2002 are shown in the last column of the table. For most series shown, the data for November are preliminary and subject to further revision. Occasionally, the data for earlier months are also subject to revision.

All series shown in the table are in billions of dollars, seasonally adjusted at annual rates, and are published by the Bureau of the Census.

	Jul.	Aug.	Sep.	2002 Oct.	Nov.	Dec. *
Private fixed investment:						
Nonresidential structures:						
Buildings:						
1 Value of new nonresidential construction put in place.....	163.7	159.8	156.5	158.9	158.7	158.9
Equipment and software:						
2 Manufacturers' shipments of complete aircraft.....	38.6	28.6	31.9	32.2	31.1	23.1
Residential structures:						
Value of new residential construction put in place:						
3 1-unit structures.....	261.8	259.3	263.8	267.1	271.3	274.2
4 2-unit-or-more.....	33.4	33.4	33.0	32.0	32.1	32.5
Change in private inventories:						
5 Change in inventories for nondurable manufacturing.....	10.2	10.9	16.4	2.0	-7.3	-2.2
5a Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment.....	31.0	12.4	26.3	-34.4	14.7	-5.1
Net exports:						
Exports of goods:						
6 U.S. exports of goods, international-transactions-						

	accounts basis.....	709.3	699.3	699.2	688.4	695.6	691.8
6a	Excluding gold.....	705.3	696.0	695.7	684.9	691.3	688.2
Imports of goods:							
7	U.S. imports of goods, international-transactions- accounts basis.....	1177.7	1207.4	1194.8	1163.1	1227.5	1224.0
7a	Excluding gold.....	1174.6	1204.3	1191.9	1159.4	1224.6	1220.4
8	Net exports of goods.....	-468.4	-508.0	-495.6	-474.7	-531.9	-532.2
8a	Excluding gold.....	-469.3	-508.3	-496.3	-474.5	-533.3	-532.2
Government:							
State and local:							
Structures:							
9	Value of new construction put in place.....	185.8	186.4	190.5	187.9	191.9	189.9

*Assumption.